

REMARKS

In the Office Action the Examiner noted that claims 6-9 and 21-26 were pending in the application and the Examiner rejected all claims. By this Amendment, various claims have been amended and claim 25 has been cancelled. Thus, claims 6-9, 21-24 and 26 are pending in the application. The Examiner's rejections are traversed below.

The Rejection

In item 2 on pages 2-10 of the Office Action the Examiner rejected claims 6-9 and 21-24 under 35 U.S.C. § 103 as unpatentable over U.S. Patent 5,435,544 to Mandel in combination with U.S. Patent 5,977,954 to Arimoto et al.

The Prior Art

U.S. Patent 5,435,544 to Mandel

The Mandel patent is directed to an electronic printer and multibin mailbox system for an electronically networked system of plural users of an electronic printer. In this system, the individual user's print jobs are automatically variably directed into particular electronically assigned print job storage bins of the multibin mailbox system (see Abstract).

The features relied on by the Examiner in making the rejection are best illustrated by Figure 18 which shows a mailbox unit in which print jobs are separated into mailboxes. A variable display indicates the bins into which the particular user's jobs have been placed last and not yet removed (column 16, lines 53-65). Figure 18 also illustrates several hoppers for input paper to be used in the printing jobs.

In columns 19 and 20 of Mandel, there is a description of prior art systems including systems wherein a plurality of work stations interact with a print service to have documents printed. In particular, remote work stations, PC terminals and facsimiles are connected for shared use of an electronic printer via a print server and/or a shared user interface formatting printing service. On page 4 of the Office Action the Examiner acknowledges that Mandel "does not teach a step of assigning a sheet input (or a paper feed inlet) by the printing apparatus for each operating relationship." However, the Examiner takes the position that this feature is taught by the Arimoto patent.

U.S. Patent 5,977,954 to Arimoto et al.

The Arimoto et al. patent is directed to an image processing system which comprises a printer and a reader which are mechanically and functionally separated so that they can be used independently of each other. The Examiner, on page 4 of the Office Action, takes the position that Figures 1A and 1B “teaches a step of assigning a paper feed inlet at the printing apparatus... for each operating relationship.”

The Present Claimed Invention Patentably Distinguishes Over The Prior Art

The claims have been amended in an effort to clarify the differences between the prior art and the present claimed invention. Specifically, in the present claimed invention, a plurality of logical printers are operated in parallel, while in the systems disclosed in the cited references, the systems perform a single job only. The above argument was presented in the prior Response and the Examiner’s Response to Arguments on pages 14-16 of the Office Action did not respond to this point. It is requested that the Examiner consider this claimed difference between the present invention and the prior art and provide a specific response to this point.

While it is true that the Arimoto et al. patent discloses paper feed cassettes 915, it is submitted that Arimoto et al. does not operate in a way which is similar to the present claimed invention. The Examiner points out column 6, lines 44-49 which describe whether an upper or lower cassette stage is selected in order to optimize the copy which is obtained. This is similar to standard copier equipment which recognizes the size of paper and selects the appropriate paper tray based on the appropriate size. The above argument was presented in the prior Response and the Examiner’s Response to Arguments on pages 14-16 of the Office Action did not respond to this point. It is requested that the Examiner consider this described difference between the present invention and the prior art and provide a specific response to this point.

Referring to claim 6, it is submitted that none of the prior art teaches or suggests:

establishing a relevant logical printer selected from the plurality of
logical printers corresponding to the print requesting device;

specifying a paper feed inlet and a paper discharge outlet for each
of the logical printers, respectively, and storing specified paper
feed inlets and paper discharge outlets in a table;

assigning a paper feed inlet and a paper discharge outlet for each of the established logical printers based on the contents stored in the table; and

receiving a print request from one of the plurality of devices independently of receiving a print request from another of the plurality of devices, and processing the print requests from each of the plurality of devices independently.

Therefore, it is submitted that claim 6 patentably distinguishes over the prior art.

Claims 7-9 depend from claim 6 and include all of the features of that claim, plus additional features which are not taught or suggested by the prior art. Therefore, it is submitted that claims 7-9 also patentably distinguish over the prior art.

Referring to claim 21, it is submitted that the prior art does not teach or suggest:

establishing a plurality of logical printers with a plurality of devices in parallel, wherein each of the logical printers is used exclusively and independently with a corresponding one of the respective devices;

assigning a feed inlet and a discharge outlet specified in advance for each of the logical printers; and

receiving a print request from one of the plurality of devices independently of receiving a print request from another of the plurality of devices, and processing the print requests from each of the plurality of devices independently.

Therefore, it is submitted that claim 21, patentably distinguishes over the prior art.

Claims 22-24 depend from claim 21 and include all of the features of that claim, plus additional features which are not taught or suggested by the prior art. Therefore, it is submitted that these claims also patentably distinguish over the prior art.

Claim 26 is directed to a printing apparatus which includes:

feed inlets and discharge outlets;

a printer engine to print on a sheet of paper; and

a printer controller to establish a plurality of logical printers with a plurality of devices in parallel, wherein each of the logical printers is used exclusively and independently with a corresponding one of the respective devices, and to print in accordance with a print request from one of the plurality of devices by using a feed inlet and a discharge outlet specified in advance for each of the logical printers,

wherein a print request is received from one of the plurality of devices independently of receiving a print request from another of the plurality of devices, and wherein the print requests are processed from each of the plurality of devices independently.

Therefore, it is submitted that claim 26 patentably distinguishes over the prior art.

In addition, it is submitted that the Examiner's line of reasoning for combining the features of Arimoto et al. and Mandel is defective. On pages 9 and 10 of the Office Action the Examiner states:

The suggestion for modifying the printer of Mandel can be reasoned by one of ordinary skill in the art as set forth above by Arimoto because the modified printer of Mandel would increase the efficiency for controlling the paper feed inlets by assigning one of the paper feed inlets for the desired paper of each print job sent from each user.

The Examiner's statement does not provide any support for his position that the reasoning (i.e., because the modified printer of Mandel would have increased efficiency) comes from the prior art.

In order to make out a prima facie case of obviousness, the Examiner must provide a line of reasoning as to why the teachings of the prior art would have been combined. However, this line of reasoning must come from the prior art and not from the applicant's specification. It is

submitted that the Examiner has supplied a line of reasoning which is not from the prior art but was created by the Examiner in order to produce a reason why a modification of Mandel would produce a better printer. Therefore, it is submitted that the Examiner's rejection is improper.

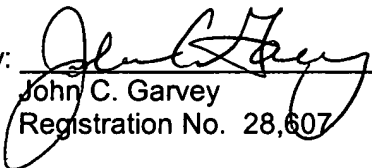
Summary

It is submitted that none of the references, either taken alone or in combination teach the present claimed invention. Thus, claims 6-9, 21-24 and 26 are deemed to be a condition suitable for allowance. Reconsideration of the claims and an early notice of allowance are earnestly solicited.

Respectfully submitted,

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